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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/529,333

03/24/2005

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81864.0057

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26021 7590 07/30/2008

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EXAMINER

KOSLOW, CAROL M

ART UNIT

PAPER NUMBER

1793

MAIL DATE

DELIVERY MODE

07/30/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/529,333	<b>Applicant(s)</b> TAKAGAWA ET AL.	
	<b>Examiner</b> C. Melissa Koslow	<b>Art Unit</b> 1793	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 18 June 2008.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1,3-5 and 11-26 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1,3-5 and 11-16 is/are allowed.
- 6) ☒ Claim(s) 17-26 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

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This action is in response to applicants' amendment of 18 June 2008. The amendments to the specification have overcome the objections to pages 13, 14 and 21. The amendments to the claims have overcome the objections to the claims, the 35 USC 112 rejection and the art rejections over claims 1, 3-5 and 11-13. In view of the amendments to the claims, the objection to the disclosure with respect to the wording is withdrawn. Applicant's arguments with respect to the remaining art rejections have been fully considered but they are not persuasive.

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 17-22 and 24-26 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1, 5 and 7-16 of copending Application No. 10/526,427. Although the conflicting claims are not identical, they are not patentably distinct from each other because the ferrite material claimed in the copending composition has a composition and properties that overlap those claimed in this application.

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This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Applicants' statement is acknowledged. Since a terminal disclaimer was not filed, the rejection is maintained.

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 17, 21 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. patent 2,924,573 in view of U.S. patents 5,698,145; 5,846,448; 6,576,169 and 6,752,932.

U.S. patent 2,924,573 teaches forming a Mn-Zn ferrite material comprising as main constituents 35-65 mol%  $\text{Fe}_2\text{O}_3$ , 10-25 mol% ZnO and 25-40 mol% MnO by compacting the ferrite powder, sintering the compact in nitrogen or in a nitrogen atmosphere having a partial pressure of oxygen of less than 0.1%, which is known in the art to include heating the compact in a furnace having the desired atmosphere and holding it the desired sintering temperature in the desired atmosphere and cooling the sintered compact at 100-300°C/hr in nitrogen or in a nitrogen atmosphere having a partial pressure of oxygen of less than 0.1%. The taught composition of the ferrite and the taught cooling rate overlap that claimed. Product claims with numerical ranges which overlap prior art ranges were held to have been obvious under 35 USC 103. *In re Wertheim* 191 USPQ 90 (CCPA 1976); *In re Malagari* 182 USPQ 549 (CCPA 1974); *In re Fields* 134 USPQ 242 (CCPA 1962); *In re Nehrenberg* 126 USPQ 383 (CCPA 1960). The reference teaches heating and cooling in the claimed atmospheres. U.S. patent 2,924,573 is silent as to milling the calcined ferrite and is silent as to the particle size of the calcined ferrite before the taught compacting step. U.S. patents 5,698,145; 5,846,448; 6,576,169 and 6,752,932 all teach

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that at the time of invention that the powders used to form Mn-Zn ferrite sintered articles should conventionally have an average particle in the range of 1-3 microns and that the calcined material is milled so as to have an average size in this range. Therefore, one of ordinary skill in the art would have found it obvious to mill the calcined powder of U.S. patent 2,924,573 so that the average particle size is within the range of 1-3 microns. This average size range falls within the claimed 90% size range and the specific surface area of particles having an average size in the range of 1-3 microns would be expected to fall within the claimed range, absent any showing to the contrary. Since the taught ferrite composition overlaps that claimed and the process conditions overlap that claimed, one of ordinary skill in the art would expect that the resulting sintered ferrite would have a core loss, volume resistivity, saturation magnetic flux density and core loss change rate that at least overlaps the claimed ranges. The references suggest the claimed process and material.

Claims 17, 20-24 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP 2000-159523 in view of U.S. patents 5,698,145; 5,846,448; 6,576,169 and 6,752,932.

The translation for JP 2000-159523 teaches forming a Mn-Zn ferrite material comprising as main constituents 60-70 mol%  $\text{Fe}_2\text{O}_3$ , greater than 0 up to 20 mol% ZnO, 0 to less than 5 mol% of NiO or  $\text{LiO}_{0.5}$  and the balance is MnO by forming a ferrite powder by milling the ferrite, compacting the ferrite powder and sintering the compact in an atmosphere comprising 1% of a partial pressure of oxygen, which is known in the art to include heating the compact in a furnace having the desired atmosphere and holding it the desired sintering temperature in the desired atmosphere. The reference teaches the material can and additive of 250 ppm niobium pentaoxide and 50 ppm tantalum pentaoxide or less than 2000 ppm of an additive selected from

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the group consisting of at least one of oxides of Nb, Zr, Ta, V and Bi. The taught amounts of additives fall within or overlap the claimed amounts of additive. The ferrite composition also overlaps that claimed. JP 2000-159523 is silent as to the particle size of the calcined ferrite before the taught compacting step. U.S. patents 5,698,145; 5,846,448; 6,576,169 and 6,752,932 all teach that at the time of invention that the powders used to form Mn-Zn ferrite sintered articles should conventionally have an average particle in the range of 1-3 microns and that the calcined material is milled so as to have an average size in this range. Therefore, one of ordinary skill in the art would have found it obvious to mill the calcined powder of JP 2000-159523 so that the average particle size is within the range of 1-3 microns. This average size range falls within the claimed 90% size range and the specific surface area of particles having an average size in the range of 1-3 microns would be expected to fall within the claimed range, absent any showing to the contrary. Since the taught ferrite composition overlaps that claimed and the process conditions overlap that claimed, one of ordinary skill in the art would expect that the resulting sintered ferrite would have a core loss, volume resistivity, saturation magnetic flux density and core loss change rate that at least overlaps the claimed ranges. The references suggest the claimed process and material.

Applicants' arguments with respect to these two rejections are that the examples fall outside the claimed ranges and the references do not disclose, teach or suggest the claimed properties. These arguments are not convincing since the references are not limited to the examples but are good for all they teach and the fact the references are silent as to the claimed properties does not overcome the rejections since there has been no showing that the taught

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ferrites do not inherently have properties ranges that overlap those claimed. The rejections are maintained.

Claims 1, 3-5 and 11-16 are allowable over the cited art of record.

These claims are allowable for the reasons given in the previous action.

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Melissa Koslow whose telephone number is (571) 272-1371. The examiner can normally be reached on Monday-Friday from 8:00 AM to 3:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jerry Lorengo, can be reached at (571) 272-1233.

The fax number for all official communications is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would

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like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/cmk/  
July 29, 2008

/C. Melissa Koslow/  
Primary Examiner  
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